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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/574,595	05/19/2000	Michael Bundy	T30418US	7510

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EXAMINER	
SUBRAMANIAN, NARAYANSWAMY	
ART UNIT	**PAPER NUMBER**
3624	

DATE MAILED: 11/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/574,595	BUNDY, MICHAEL	
	Examiner	Art Unit	
	Narayanswamy Subramanian	3624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 August 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8 and 18-40* is/are pending in the application.

4a) Of the above claim(s) *25-40* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 18-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is in response to the request for continued examination filed on August 23, 2004. Amendments to claims 1-8, 18 and 22, cancellation of claim 17, and addition of new claims 25-40 have been entered. Claims 1-8 and 18-40 are currently pending. Claims 25-40 are subject to restriction as discussed below and have been withdrawn from consideration by the Examiner. Claims 1-8 and 18-24 and have been examined. The response to amendment, rejections and response to arguments are stated below.

Response to Amendment

2. Newly submitted claims 25-40 are subject to restriction under 35 U.S.C. 121for the following reasons:

I. Claims 1-8 and 18-24, drawn to a method of displaying latency, classified in class 705, subclass 36.

II. Claims 25-32, drawn to a method of selecting a market, classified in class 705, subclass 36.

III. Claims 33-40 drawn to a method of selecting a port connected to a market, said market connected to at least a first port and a second port, classified in class 705, subclass 36.

The inventions are distinct, each from the other because of the following reasons:

3. Inventions I and II are related as sub combinations disclosed as usable together in a single combination. The sub combinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I relates to a method of displaying latency, whereas invention II relates to a method of selecting a market. See MPEP § 806.05(d). Because these inventions are distinct for the reasons given above and the search required for Group I is

not required for Group II, restriction for examination purposes as indicated is proper even though they are in the same class and subclass.

Inventions I and III are related as sub combinations disclosed as usable together in a single combination. The sub combinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I relates to a method of displaying latency, whereas invention III relates to a method of selecting a port connected to a market, said market connected to at least a first port and a second port. See MPEP § 806.05(d). Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group III, restriction for examination purposes as indicated is proper even though they are in the same class and subclass.

Inventions III and II are related as sub combinations disclosed as usable together in a single combination. The sub combinations are distinct from each other if they are shown to be separately usable. In the instant case, invention III relates to a method of selecting a port connected to a market, said market connected to at least a first port and a second port, whereas invention II relates to a method of selecting a market. See MPEP § 806.05(d). Because these inventions are distinct for the reasons given above and the search required for Group III is not required for Group II, restriction for examination purposes as indicated is proper even though they are in the same class and subclass.

4. Since applicant has received an action on the merits for the originally presented claims, these claims have been constructively elected by original presentation for prosecution on the merits. The Examiner has chosen to examine claims of invention I pertaining to claims 1-8 and 18-24. Accordingly, claims 25-40 are withdrawn from consideration as being directed to a non-

elected invention. See 37 CFR 1.142(b) and MPEP § 821.03. Applicants in replying to this office action are respectfully advised to cancel the non-elected claims.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 3-7, 17, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson (US Patent 5,864,827) in view of Cuomo et al (US Patent 6,272,539 B1).

With respect to claims 1 and 17, Wilson teaches a method implemented in a broker-dealer computer system, the system being engaged in automated processing of orders for securities including sending messages to a plurality of markets and receiving from said markets responses to messages, the method comprising the steps of recording for messages sent to the markets the identity of the market to which each message is sent, the messages comprising orders and displaying the identity of the market (See Wilson Figure 3, Column 5 lines 19-25, Column 6 lines 22-30 and lines 44-55); and wherein said messages are sent to different ones of said markets (See Wilson Column 3 lines 8-12). Plurality of markets includes two different markets and the device of Wilson includes I/O device for display of pertinent information.

Wilson does not explicitly teach the steps of recording the time when each message is sent, recording for responses received from recipient of the message the time when each response is received, wherein each response corresponds to a particular message, calculating for

a recipient a latency dependent upon at least one recorded time when at least one message is sent to the recipient and at least one recorded time when a corresponding response is received from the recipient and displaying the latency for the recipient.

Cuomo teaches the steps of recording the time when each message is sent, recording for responses received from recipient of the message the time when each response is received, wherein each response corresponds to a particular message, calculating for a recipient a latency dependent upon at least one recorded time when at least one message is sent to the recipient and at least one recorded time when a corresponding response is received from the recipient and displaying the latency for the recipient. (See Cuomo abstract, Column 3 lines 11-16, 28-35, Column 3 line 44 – Column 4 line 21, Claims 1-3).

Both Cuomo and Wilson are concerned with the problem of communication over a network between a user and another network user (such as a server or a market). It would have been obvious to one with ordinary skill in the art at the time of the current invention to include the teaching of Cuomo to the invention of Wilson. The combination of the disclosures taken as a whole suggests users would have benefited from having information about network delays so that they may make informed decisions about further course of action.

With reference to claims 3-7, 20 and 22, Cuomo teaches a method claim 1, wherein the latency comprises an instant latency calculated dependent upon one recorded time when one message is sent to a market and one recorded time when a corresponding response is received from the market (See Cuomo Claim 3); wherein the latency comprises an average latency based upon at least one recorded time when at least one message is sent to the market and at least one recorded time when a corresponding response is received from the market, wherein all the

recorded times used in calculating the latency are recorded during a defined period of time (See Cuomo Column 4 lines 16-20) wherein the number of recorded times used to calculated the average latency is limited to a defined maximum (inherent in the disclosure) and wherein the calculating uses the latest recorded time when a message is sent to the market and the latest recorded time when a corresponding response is received from the market, and wherein the number of recorded times used to calculated the average latency is limited to a defined maximum, and is more than one (inherent in the disclosure); further comprising the steps of counting the number of messages sent to at least one market during a period of time, including storing in computer memory the number of messages sent to the market during the period of time, counting the number of responses received from the market during the period of time, including storing in computer memory the number of responses received from the market during the period of time and displaying the latency for the market, the number of messages sent to the market and the number of responses received from the market during the period of time (See Figures 6A-6C, Column 13 lines 22-42); step of displaying being to a customer who originates at least one of said messages and selects one of servers after said step of displaying (See Cuomo Column 14 lines 43-50); and average latency dependent upon at least two recorded times when at least two messages are sent to a market and at least two recorded times when corresponding responses are received from the market (See Cuomo Column 10 lines 39-46). It would have been obvious to one with ordinary skill in the art at the time of the current invention to include the teaching of Cuomo to the invention of Wilson. The combination of the disclosures taken as a whole suggests users would have benefited from having information about network delays so that they may make informed decisions about further course of action.

7. Claims 2, 8 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson (US Patent 5,864,827) in view of Cuomo et al (US Patent 6,272,539 B1) and further in view of Grochowski et al (US Patent 6,035,389).

With reference to claims 2, 8 and 23, Wilson and Cuomo combined teach a method of claim 1 as discussed above including absence of responses due to equipment failure (See Cuomo Column 10 lines 57-64).

Wilson and Cuomo combined do not explicitly teach the step of latency for a port.

Grochowski teaches the step of latency for a port (See Grochowski abstract, Column 2 lines 19-25) Equipment failure is interpreted to include failure of ports also.

Cuomo, Wilson and Grochowski are concerned with the problem of communication over a network between a user and another network user. It would have been obvious to one with ordinary skill in the art at the time of the current invention to include the teaching of Grochowski to the disclosures of Cuomo and Wilson. The combination of the disclosures taken as a whole suggests users would have benefited from having information about port delays so that they may make informed decisions about further course of action.

8. Claims 18, 19, 21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilson (US Patent 5,864,827) in view of Cuomo et al (US Patent 6,272,539 B1) and further in view of Patterson Jr. et al (US Patent 5,915,245).

With reference to claims 18, 19, 21 and 24, Wilson and Cuomo combined teach a method of claim 1 as discussed above.

Wilson and Cuomo combined do not explicitly teach the steps of selecting one of said markets based on status information; messages further comprising cancellations of orders; and

response indicating that at least one of said orders has been filled or that at least one of said orders has not been filled.

Patterson teaches the steps of selecting one of said markets based on status information (See Patterson Column 9 line 52 – Column 10 line 9, status is interpreted to include latency also); messages further comprising cancellations of orders (See Patterson Column 7 lines 4-7); response indicating that at least one of said orders has been filled or that at least one of said orders has not been filled (See Patterson Column 2 lines 26-28). Partially filled implies that at least one of said orders has not been filled.

It would have been obvious to one with ordinary skill in the art at the time of the current invention to include the teaching of Patterson to the disclosures of Cuomo and Wilson. The combination of the disclosures taken as a whole suggests users would have benefited from having information about the status of their orders and the markets so that they may make informed decisions about how best to route new orders.

Response to Arguments

9. Applicant's arguments with respect to claims 1, 3-7, 17, 20 and 22 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Narayanswamy Subramanian whose telephone number is (703) 305-4878. The examiner can normally be reached Monday-Thursday from 8:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent Millin can be reached at (703) 308-1065. The fax number for Formal or Official faxes and Draft or Informal faxes to Technology Center 3600 or this Art Unit is (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1113.

N. Subramanian
November 20, 2004

11/22/04

Jagdish N. Patel
Primary Examiner